

**REMARKS**

Claims 1-7 are pending in the application, of which claim 7 has been cancelled and claim 1 has been amended in order to more particularly point out, and distinctly claim the subject matter to which the applicants regard as their invention.

**Claim Rejections under 35 USC §102**

Claims 1, 3 and 7 stand rejected under 35 U.S.C. 102(b) as being anticipated by Nakamura (U.S. 2001/0010136 A1).

The present invention is a method of laying and distributing optical fiber cables (1) by passing the cable through a gutter or drain pipe (2). As indicated on page 9, lines 16-22 of the specification the occupied cross-sectional area of the optical fiber cables (1) is preferably equal to or less than 50% of the cross-sectional area of the gutter or drain pipe (2) to allow for a sufficient flow path for water. When a branch pipe (4) is connected to the gutter or drain pipe (2), the optical fiber cables (1) are gathered at an inner side of the gutter or drain pipe (2) opposite to the connection portion. A partition plate (5) may be used as shown in Figure. 2 to ensure a path for the cables in order to prevent the drainability of the gutters or drain pipes (2) from dropping. As shown in Figure 6, a support (8) is provided having a concavo-convex portions with which several optical fiber cables can be placed and supported inside the gutter or drain pipe (2), so that the optical fiber cables (1) can be lead through the gutter or drain pipe (2). Further, the fiber optic cables (1) can be passed through a sheath tube (6) to protect them from rain water.

Nakamura describes pulling a communication cable through a rainwater drainpipe of a house.

Claim 1 has been amended so to distinguish it over the prior art. However, contrary to the Examiner's assertions Nakamura does not disclose "a support having concavo-convex portions capable of arranging and supporting a plurality of optical fiber cables disposed inside the gutter or drain pipe" as recited in claim 7 and shown in Figure 6.

Therefore, claim 1 patentably distinguishes over the prior art relied upon by reciting,

"A method of distributing and laying, inside a building, optical fiber cables drawn into the building from a trunk cable, the method comprising passing the optical fiber cables through the inside of a gutter or drain pipe, wherein a support having concavo-convex portions is provided with which a plurality of optical fiber cables is placed and supported inside the gutter or drain pipe around an outer circumference of the support, so that the optical fiber cables can be lead through the gutter or drain pipe and water may pass through a center cavity of the support."  
(Emphasis Added)

Therefore, withdrawal of the rejection of claims 1, 3 and 7 under 35 U.S.C. 102(b) as being anticipated by Nakamura (U.S. 2001/0010136 A1) is respectfully requested.

### **Claim Rejections under 35 USC §103**

Claim 2 stands rejected under 35 U.S.C. 103(a) as being unpatentable over Nakamura, as cited above.

On page 5 of the Office Action the Examiner asserts that the optical fiber cables being equal to or less than 50% of the cross-sectional area of the inside of the gutter or drain pipe is obvious since the efficiency of the optical transmission is dependent on the cross-sectional area of the cable. However, as indicated on page 9, lines 16-22 of the specification the occupied cross-sectional area of the optical fiber cables (1) is preferably equal to or less than 50% of the cross-sectional area of

the gutter or drain pipe (2) to allow for a sufficient flow path for water. Therefore, the size of the cable (1) is limited to allow for water flow not the optical transmission capable. Further, contrary to the Examiner's assertion the applicant does disclose the criticality of the value claimed. As indicated on page 9, lines 16-22 the size limit of the cable is critical to water flow.

Therefore, withdrawal of the rejection of claim 2 under 35 U.S.C. 103(a) as being unpatentable over Nakamura is respectfully requested.

Claim 4 stands rejected under 35 U.S.C. 103(a) as being unpatentable over Nakamura, as cited above, and further in view of Takeji et al. (JP 11-198231).

Takeji et al. describes a flat bar-like covering member (17) mounted in a sewage pipe (2) to cover an optical fiber (8).

Claim 4 is allowable by virtue of its dependence on an allowable independent claim. Therefore, withdrawal of the rejection of claim 4 under 35 U.S.C. 103(a) as being unpatentable over Nakamura, as cited above, and further in view of Takeji et al. (JP 11-198231) is respectfully requested.

Claims 5 and 6 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Nakamura, as cited above, and further in view of Sadaji et al. (JP 04-199105).

Sadaji et al. describes an optical fiber cable laying method in which optical fiber cable is placed in a flat cable duct to protect it.

U.S. Patent Application Serial No. **10/516,301**  
Reply to OA dated January 25, 2006

Claims 5 and 6 are allowable by virtue of their dependence on an allowable independent claim. Therefore, withdrawal of the rejection of claims 5 and 6 under 35 U.S.C. 103(a) as being unpatentable over Nakamura, as cited above, and further in view of Sadaji et al. (JP 04-199105) is respectfully requested.

**Conclusion**

In view of the aforementioned amendments and accompanying remarks, claim 1, as amended, and claims 2-6, are believed to be patentable and in condition for allowance, which action, at an early date, is respectfully requested.

If, for any reason, it is felt that this application is not now in condition for allowance, the Examiner is requested to contact the applicants' undersigned attorney at the telephone number indicated below to arrange for an interview to expedite the disposition of this case.

In the event that this paper is not timely filed, the applicants respectfully petition for an appropriate extension of time. Please charge any fees for such an extension of time and any other fees which may be due with respect to this paper, to Deposit Account No. 01-2340.

Respectfully submitted,

ARMSTRONG, KRATZ, QUINTOS,  
HANSON & BROOKS, LLP



George N. Stevens  
Attorney for Applicant  
Reg. No. 36,938

GNS/nrp  
Atty. Docket No. 040650  
Suite 1000  
1725 K Street, N.W.  
Washington, D.C. 20006  
(202) 659-2930



23850

PATENT TRADEMARK OFFICE